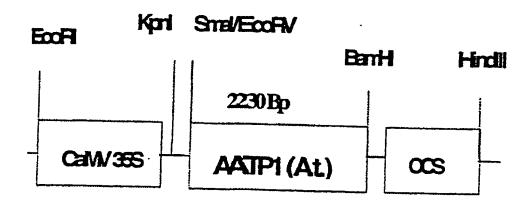
Fig. 1: Arabidopsis thaliana cDNA corresponding to the coding region of the chloroplast ATP/ADP trans-locator 1 (EMBL Accession Number Z49227)

atggaagctgtgattcaaaccagagggcttctctcttttacccaccaaacccatcggagtgagaagcca acttcagccttcccatggcttaaagcagagacttttcgccgcgaagccaagaaatctacatgggtgtct ctatcctttaacgggcacaagaaatttcaaacctttgagccaaccctgcatgggatttcgatttcccaca aagagagaagcaccgagttcatatgcaaggcggaggcggcggctgctggcgacggagctgtcttcg gcgaagcgattccgcagctgttgtagcctcgcggaagattttcggtgtggaggttgcaaccttgaaaaa gattatecetttaggattgatgttettttgtattetttteaattaeacaattetgagggataeaaaggatgtettg gtggtgacggcgaaaggaagttctgctgagattatacctttcttgaagacttgggtgaatcttcctatggc cattgggtttatgctcctctacactaaactctccaatgttctctccaagaaggctctgttttacactgttattgtc cctttcatcatctactttgggggctttggtttcgtcatgtaccctctcagcaactatattcacccggaagctct cgcagataagctccttacaaccctcggcccaagattcatgggtcctattgcaatattgcggatttggagtt tctgtttgtttatgttatggctgagctttggggtagtgtggtggtctcagttctcttctggggctttgctaatcag atcacaactgtggatgaagccaagaaattctatcctttgttcggcattggagccaatgttgcactgattttc ttgaaagccatgatgagcattgtggggaatgggactcgcatttgtctctctattggtgggtcgaataga tatgttcctcttccaacccgtagcaagaacaagaaggagaaaccgaagatgggaacgatggaaag cttgaagttcttggtatcatcaccatacattagagatcttgctactttagtggtggcatacggtattagtatca atcttgtggaagtcacatggaaatcaaagcttaaagctcagttccctagcccgaatgagtactcagcatt tatgggagcattctcaacctgcacgggtgttgcaacattcacaatgatgcttctcagccaatacgtattca ataagtatggttggggagtagctgcaaagatcaccccaactgttctgctattgactggtgttgcgttcttct ctctaatattgtttggcggcccattcgcaccacttgttgccaagcttggtatgacaccgctacttgcagctgt gtatgtcggtgcccttcagaatatcttcagcaagagtgccaagtacagcttgttcgacccttgcaaagaa atggcctatatcccattggatgaggacaccaaggttaaaggcaaagctgcgattgacgtggtctgcaa cccattaggaaaatcagggggagctttaatacagcagttcatgatcttatcctttggatcactagcgaatt caacgccgtatctaggaatgatcttgttggttattgtcactgcgtggttagctgcagctaagtcgctggag ggacagttcaacagcttgcgtctgaagaagagcttgagaaggaaatggagagagcttcatcggtga

Fig. 2: Solanum tuberosum cDNA corresponding to the coding region of the chloroplast ATP/ADP trans-locator 1 (EMBL Accession Number Y10821)

atggaaggtgttttacaaacaagagggcttctttctttgccttctaaacccaaaatcaaggctttttacccat tgcctcaagggggtctaaggaacagattcaattctttaagtagtttaaagcctaatcctcttaatggggttt ctttatcttcaaatgggtttcaaaagttcaaggctttgacacaaagcctcagttgtttggccaaaagaag aggtgttttccaatatgcaaagctgaggctgctgctgctgctggtgcagctgatggacagccactttttgtt gaaaaggagcaacctaagtttatggggattgaacttgtgacccttaagaaaattataccacttggggcg atgttcttttgtattctgtttaattatacaatccttagggatactaaggatgttgttgttaacagctaaaggg tccagtgctgagattatccctttcttgaaaacttgggtgaatttgcctatggctattggattcatgcttttgtacacaaagttggctaatgtgttgtcaaaggaggctcttttttatactgttatacttccttttattgcattctttggggc gtttggttttgttttgtatcctcttagcaattactttcaccctacagcttttgctgataagcttctcaatacccttgg tccaagatttcttggaccaattgctattctgaggatctggagtttctgcttgttctatgtcatggctgagctttg gggaagtgtggtggtttcagtactcttttggggatttgctaatcagatcacgactgtcgatgaggctaaga gattctatcctttgtttggacttggagcgaatgttgctcttattttctctggtcgcacagtgaagtacttttctag gaagaagaaggtaaaacctaacatgaccacaatggagagcttgaagttcttggtctcttcaaaatatat cagggatcttgccacattggttgtagcatatggcattagtatcaaccttgttgaagttacatggaagtcaa ageteaaageteaagteecaageeceaatgaatacteeteatteatgggtgaetteteaaetgetaetgg acctactcttgcgaagtttggaatgactcctcttctagcagctgtctatgtgggtgcaatgcagaacattttc agtaagagtgcaaagtatagtttgtttgacccctgcaaagaaatggcctacattcctttggatgaggaca ccaaggttaaagggaaggcagcaatcgatgttgtctgcaatccactgggaaagtctggaggagctttg atacaacagttcatgattttgacttttggttcacttgccagctcgacaccctaccttggcggtgtgctcttagt gatcttgagaaggaaatggagagcatcgttgaagatccctgtcgtgtctcaaaatgaaaatggaa atggtcctctctcaagtgagtcatcactaaatcccgctggaggtgactctaccaacgcttcatcggaacc ctcctcccaaggagcctgtaa

Fig. 3: Plant transformation vector pBIN-AR-AATP1 for expressing the ATP/ADP translocator in sense orientation



CaMV 35S: cauliflower mosaic virus 35S promoter

AATP1 (A.t.): EcoRV/BamHI fragment of the Arabidopsis

thaliana ATP/ADP translocator 1 in sense

orientation

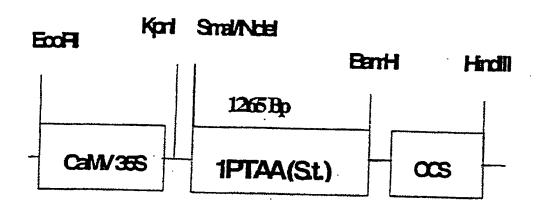
OCS: polyadenylation signal of the Agrobac-

terium tumefaciens octopine synthase

gene

Those restriction sites which cut the vector only once are also shown.

Fig. 4: Plant transformation vector pBIN-AR-AATP1-AS for expressing the ATP/ADP translocator in antisense orientation



CaMV 35S: cauliflower mosaic virus 35S promoter

1PTAA (S.t.): BamHI/NdeI fragment of the Solanum

tuberosum ATP/ADP translocator gene in

antisense orientation

OCS: polyadenylation signal of the Agrobac-

terium tumefaciens octopine synthase

gene

Those restriction sites which cut the vector only once are also shown.